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Junk food consumption trends point to the need for retail policies

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The term “junk food” is generally understood to include processed foods and beverages that are high in calories, added sugars, sodium, and saturated fat (1). These products are harmful because excessive consumption is associated with increased risk of negative health outcomes (e.g., obesity, hypertension, and cancer) (2). In response, a range of strategies have been tried to discourage consumption of these foods, ranging from guidance in the Dietary Guidelines for Americans to limit calories from these foods, to the USDA’s “Smart Snacks” regulations that control what can be sold in schools, to industry self-regulation promises to improve the nutritional quality of products marketed to children. But have things gotten better?

There is some evidence that things have improved in the past 10 y. A study using data from the late 1970s found that a dramatic increase in snack food and beverage consumption peaked in 2003–2006 and then started to decrease by 2011–2014 (3). This finding is consistent with another study that found significant decreases in consumption of sugar-sweetened beverages between 2003 and 2014 among children and adults (4). Further, a more recent study found significant decreases between 2003 and 2016 in junk food and beverage consumption when measured as the proportion of foods consumed, and changes in calories, total sugar, saturated fat, and sodium (1).

In this issue of *The American Journal of Clinical Nutrition*, Liu et al. (5) contribute to this literature by examining trends in junk food consumption among children and adults between 2001 and 2018. Using nationally representative dietary recalls from 9 NHANES cycles, they defined junk foods to include savory snacks, crackers, snack/meal bars, sweet bakery products, candy, and other desserts. They did not include beverages in their analyses. They also examined the sources for each food (i.e., school, grocery store, restaurant).

Somewhat surprisingly, Liu et al. found limited evidence of improvements in snack consumption. For adults, there was a small but significant reduction of energy consumed from junk food from 14.1% in 2001 to 13.0% in 2018, but for children, the percentage of energy consumed from junk foods was high and did not change significantly over the timeframe of the study: from 18.1% to 17.5%. Interestingly, there were significant decreases in particular junk food categories (e.g., candy, cakes, and pies) which were offset by increases in other categories, especially the category of snack/meal bars.

The increase in consumption of the snack/meal bar category, which is further divided into “cereal bars” and “nutrition bars,”

warrants further attention. These products often meet the criteria of junk food, and yet benefit from a “health halo” due to effective marketing. For example, research has found that consumers perceive energy/nutrition bars to be healthier when they include the word “protein” in the name (6). Marketing has also been on the rise—between 2010 and 2014 there was a 25% increase in total advertising spending by leading brands of snack bars, which corresponded to children aged 6–11 y being exposed to 65% more television advertisements for these products in 2014 than in 2010 (7). This may partly explain why Liu et al. observed a significant increase in this category of junk food, and points to a need for stronger policies to regulate how these products are marketed, especially to children.

Another surprising finding from the Liu et al. study was that even though the percentage of energy from junk food obtained at school was quite low (i.e., 4.2%–5.4%), it did not improve over time. One would have expected it to improve because other research has found that the regulation updates that emerged from the 2010 Healthy Hunger-Free Kids Act significantly improved both school meals and the nutritional quality of competitive foods (i.e., Smart Snacks) (8). Further, in 2017–2018 the food children consumed at school had the highest diet quality compared with all other sources of food (9). However, the Liu et al. finding suggests that children are still consuming junk food like chips and cookies at school, even if the products have been reformulated to meet Smart Snack standards.

One striking finding from Liu et al. is that 70% of the junk food consumed by children and adults is purchased at the grocery store. This highlights the need for policies designed to influence consumers at the point of purchase. One of the most powerful ways to do this is by increasing the price through taxes (10). In Mexico, there is an 8% tax on junk food (defined as nonessential foods with an energy density ≥ 275 kcal/100 g) and early evidence suggests that this has resulted in a 5%–10% decrease in purchases compared with the trend that would be expected with no tax (11).

Requiring front-of-package (FOP) warning labels for nutrients of concern, such as sugar, salt, or fats, has been proposed as another strategy to decrease purchases of junk food (12). FOP labels help consumers make healthier choices quickly because

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they can simplify complex nutrition information into an easy-to-interpret graphic. A second benefit of this strategy is that it may incentivize industry reformulation to reduce the amounts of the nutrients of concern (12). Countries that currently have government-mandated warning labels include Finland, Thailand, Chile, Israel, Peru, and Mexico (12, 13).

Finally, in order to decrease the consumption of junk food, it is critically important to limit exposure to junk food marketing overall, and cease all unhealthy food marketing directed to youth (14, 15). In 2014 >40% of all food and beverage advertisements viewed by children and adolescents on television were for snack foods (7). In addition to seeing advertisements on television, online, and via social media, youth are exposed to significant marketing on food packages themselves, such as ready-to-eat breakfast cereals (16) and sugary drinks (17). Chile was the first country to ban all child-directed marketing occurring on junk food packages in 2016, and Mexico followed in 2021. In the United States, the Children Food and Beverage Advertising Initiative (CFBAI) is an industry-led self-regulatory program in which participants pledge to advertise only healthier products to children <12 y old (15). However, the CFBAI excludes child-directed marketing on food packages from its pledges, thus reducing its impact.

Although progress has been made to improve the food environment in the United States through some policies, more work needs to be done. It is important to recognize that no single strategy or policy is going to be influential enough to reduce junk food consumption to healthy amounts in the entire population (18). Instead, a combination of mutually reinforcing policies is needed to continue to move children and adults in the United States toward a healthier diet and improved health.

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